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ANNUAL REPORT

OF THE

COMMISSIONER OF LABOUR

OF THE

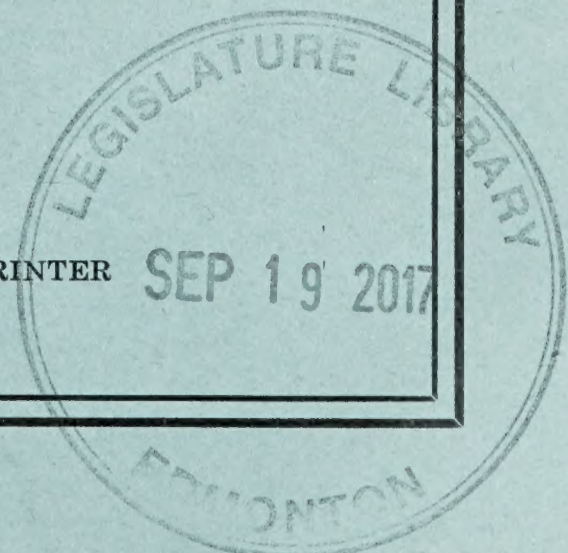
Province of Alberta

FOR THE FISCAL YEAR

1931-32

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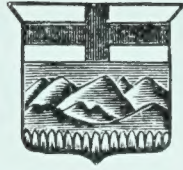
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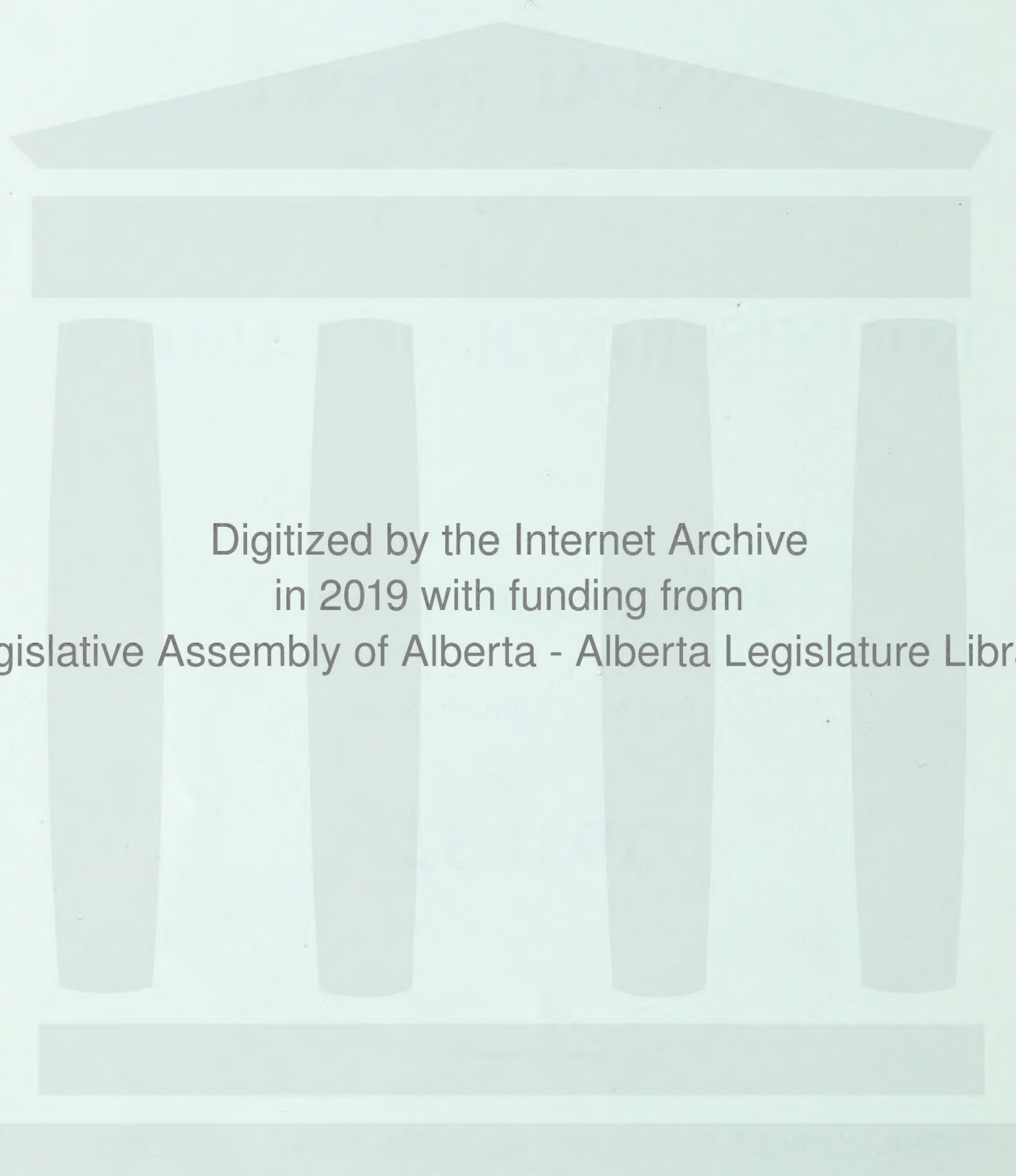
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# Annual Report of the Commissioner of Labour, of the Province of Alberta, for the Fiscal Year 1931-1932

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HON. J. E. BROWNLEE,  
*Premier of Alberta,*  
Edmonton, Alberta.

SIR:

I have the honour to submit herewith the report of the Bureau of Labour for the fiscal year ending March 31, 1932.

During the year 17,431 pieces of mail were received and 14,846 ordinary, 430 registered and 917 parcels were sent out; 1,138 pieces of cash, amounting in total to \$37,360.86, were received, and 447 expenditure vouchers prepared. Records of income and expenditure have been checked with the Audit and were found to be correct.

Inspections under The Factories Act, Minimum Wage Act, Theatres Act and Steam Boilers Act were carried out efficiently.

Regulations were made under The Trades Schools Regulation Act and licenses were granted for the operation of eight trade schools.

The returns from the Employment Service indicate a marked decline in the number of employment opportunities in general industry and a very heavy increase in the number of applicants for work. Specially created work, to relieve distress due to unemployment, was responsible for a considerable proportion of male placements made.

Supervision of unemployment relief measures in the five cities where employment offices are located was carried out.

The report of the Minimum Wage Board contains a record of the various matters which received attention during the period.

Respectfully submitted,

W. SMITTEN,  
*Commissioner of Labour.*

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## STATISTICS OF TRADES AND INDUSTRIES

The returns received this year indicate a further decline in business, the volume of decline being much greater than that of the previous year.

Returns from 2,808 firms covered 40,030 male employees over eighteen, 571 males under eighteen, 7,793 females over eighteen, 229 females under eighteen, and 509 apprentices.



Total payments for wages and salaries were \$63,786,134.52, of which sum \$54,254,896.47 was paid to wage earners.

The returns, when considered as to employment by months for males, for the first time since returns have been received show a steady decline during the entire year, there being practically no improvement through usual seasonal activities. December was the month of least employment, when 38,497 were employed, and January the month of greatest, when 41,507 were employed.

As in previous years, the returns, when considered by individual industries, show great fluctuations, demonstrating again that for the unskilled work in the various industries men interchange from one to the other.

The returns of monthly employment of females indicate very little change in volume of employment throughout the year. Summer holiday trade and Christmas activities did, however, bring additional employment.

The accompanying tables give in detail the industrial returns.

SUMMARY OF ALL 2,808 FIRMS

Officers, Superintendents and Managers.....	\$ 9,531,238.05
Clerks, Stenographers, Bookkeepers, etc.....	10,214,308.43
Wage-earners (including piece-workers, salesmen, etc.).....	44,040,588.04
	<u>\$63,786,134.52</u>

AVERAGE NUMBER OF WAGE-EARNERS

1931—					
Month	Males	Females	Month	Males	Females
January .....	41,507	7,245	July .....	40,874	7,573
February .....	39,763	7,234	August .....	40,047	7,491
March .....	39,215	7,275	September .....	40,823	7,612
April .....	39,620	7,331	October .....	39,909	7,301
May .....	39,975	7,558	November .....	39,763	7,258
June .....	40,010	7,795	December .....	38,497	7,543

CLASSIFIED WEEKLY WAGE RATES (WAGE-EARNERS ONLY).

For Week of Employment of Greatest Number	MALES		FEMALES		Appren- tices
	18 Years and Over	Under 18 Years	18 Years and Over	Under 18 Years	
Under \$6.00 .....	219	42	83	5	30
\$ 6.00 to \$ 6.99.....	70	29	64	9	21
7.00 to 7.99.....	95	47	85	16	29
8.00 to 8.99.....	211	41	131	11	45
9.00 to 9.99.....	217	66	243	15	24
10.00 to 10.99.....	381	80	310	17	64
11.00 to 11.99.....	393	42	231	26	14
12.00 to 12.99.....	906	90	1,417	93	48
13.00 to 13.99.....	552	26	511	10	19
14.00 to 14.99.....	905	12	826	21	29
15.00 to 15.99.....	1,055	28	801	2	31
16.00 to 16.99.....	905	11	469	2	27
17.00 to 17.99.....	844	7	306	1	32
18.00 to 18.99.....	2,218	39	419	1	4
19.00 to 19.99.....	1,227	....	181	....	19
20.00 to 20.99.....	1,891	5	330	....	3
21.00 to 21.99.....	1,312	2	174	....	1
22.00 to 22.99.....	2,560	....	190	....	9
23.00 to 23.99.....	1,084	....	124	....	2
24.00 to 24.99.....	1,688	2	127	....	4
25.00 to 25.99.....	1,721	....	197	....	5
26.00 to 26.99.....	1,097	....	62	....	16
27.00 to 27.99.....	1,137	....	74	....	3
28.00 to 28.99.....	1,654	2	65	....	3
29.00 to 29.99.....	1,144	....	46	....	5
30.00 to 34.99.....	5,920	....	83	....	18
35.00 to 39.99.....	2,847	....	163	....	4
40.00 to 44.99.....	2,315	....	42	....	....
45.00 to 49.99.....	1,178	....	14	....	....
50.00 and over.....	2,284	....	25	....	....
Totals.....	40,030	571	7,793	229	509



WEEKLY HOURS OF LABOUR

2	employees	worked	2	hours
4	"	"	3	"
4	"	"	4	"
8	"	"	5	"
29	"	"	6	"
6	"	"	7	"
24	"	"	8	"
17	"	"	9	"
16	"	"	10	"
63	"	"	12	"
8	"	"	14	"
16	"	"	15	"
7	"	"	16	"
40	"	"	18	"
3	"	"	19	"
26	"	"	20	"
13	"	"	21	"
41	"	"	22	"
180	"	"	24	"
11	"	"	25	"
10	"	"	26	"
11	"	"	27	"
480	"	"	28	"
10	"	"	29	"
50	"	"	30	"
7	"	"	31	"
79	"	"	32	"
10	"	"	33	"
15	"	"	34	"
107	"	"	35	"
210	"	"	36	"
52	"	"	37	"
319	"	"	38	"
728	"	"	39	"
4,522	"	"	40	"
336	"	"	41	"
819	"	"	42	"
149	"	"	43	"
10,485	"	"	44	"
2,839	"	"	45	"
514	"	"	46	"
439	"	"	47	"
21,229	"	"	48	"
395	"	"	49	"
1,027	"	"	50	"
244	"	"	51	"
610	"	"	52	"
107	"	"	53	"
2,751	"	"	54	"
27	"	"	55	"
1,527	"	"	56	"
43	"	"	57	"
59	"	"	58	"
1 employee	"	"	59	"
2,576 employees	"	"	60	"
2	"	"	61	"
1 employee	"	"	62	"
102 employees	"	"	63	"
2	"	"	64	"
2	"	"	65	"
8	"	"	66	"
4	"	"	68	"
275	"	"	70	"
45	"	"	73	"
1 employee	"	"	74	"
4 employees	"	"	75	"
1 employee	"	"	76	"
5 employees	"	"	77	"
1 employee	"	"	78	"
8 employees	"	"	80	"
29	"	"	84	"
1 employee	"	"	88	"
4 employees	"	"	91	"
1 employee	"	"	101	"

PERIOD OF OPERATION

2,450	firms	operated	52	weeks
6	"	"	51	"
21	"	"	50	"
7	"	"	49	"
17	"	"	48	"
6	"	"	47	"
5	"	"	46	"
5	"	"	45	"
14	"	"	44	"
6	"	"	43	"
5	"	"	42	"
7	"	"	41	"
20	"	"	40	"
5	"	"	39	"
2	"	"	38	"
2	"	"	37	"
7	"	"	36	"
16	"	"	35	"
3	"	"	34	"
5	"	"	33	"
7	"	"	32	"
2	"	"	31	"
14	"	"	30	"
5	"	"	28	"
2	"	"	27	"
12	"	"	26	"
10	"	"	25	"
10	"	"	24	"
7	"	"	23	"
8	"	"	22	"
7	"	"	21	"
10	"	"	20	"
4	"	"	19	"
8	"	"	18	"
13	"	"	17	"
9	"	"	16	"
5	"	"	15	"
9	"	"	14	"
10	"	"	13	"
6	"	"	12	"
1 firm	"	"	11	"
5 firms	"	"	10	"
5	"	"	9	"
9	"	"	8	"
2	"	"	7	"
5	"	"	6	"
3	"	"	5	"
2	"	"	4	"
7	"	"	3	"
1 firm	"	"	2	"
1	"	"	1	"



THE LABOUR DISPUTES ACT

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February 4, 1932.

TO HIS HONOUR,  
W. L. WALSH,  
*Lieutenant Governor of the Province of Alberta.*

Sir:

In compliance with the provisions of Section 69 of The Labour Disputes Act, I have the honour to submit the following report relating to the matters transacted by me under the provisions of The Labour Disputes Act during the year 1931.

Applications were received for the appointments of Boards of Conciliation and Investigation as follows:

(1) From the Beverage Dispensers' Alliance No. 538, Calgary, in respect of an alleged dispute between the Local Union and the Hotel Proprietors, of Calgary.

(2) From the United Brotherhood of Carpenters and Joiners, Local No. 1779, of Calgary, in respect of an alleged dispute between the Local Union and certain operators of planing mills in Calgary.

In respect of the first application, while the employers at the outset were opposed, after negotiations an understanding was reached and a Board consisting of L. Brockington, Chairman, W. E. Kehoe, representing employers, and J. E. Worsley, representing employees, was appointed. As a result of the work of the Board an agreement was reached which was accepted by both parties to the dispute.

In respect of the second application, there appeared to be a definite probability of a stoppage of work, therefore a Board was created, although the employers refused to name a representative. The Board, consisting of J. F. Quigley, Chairman, J. A. Tweddle, representing employers, and F. J. White, representing employees, presented an unanimous report which the employees agreed to accept, but which was not accepted by the employers.

The reports of the Boards were published in *The Alberta Gazette*, in accordance with the provisions of the Act.

Respectfully submitted,

(Sgd.) J. E. BROWNLEE,  
*Premier.*



## INSPECTIONS

Returns of Inspectors covering inspections under The Factories Act show decreases in the staffs of practically all of the places visited.

A total of 4,638 inspections was made of 4,386 factories, shops, hotels, offices and office buildings, in which were employed 21,107 males and 7,355 females.

Recommendations relative to safety, sanitation, hours and wages, and the employment of children, to the number of 1,102 were made, all of which were carried out by employers.

There were 515 inspections made of 491 elevators, in connection with which 413 safety recommendations were made. Of the elevators 143 were passenger, 330 freight and 18 Humphrey.

Owners of elevators continue to appreciate this service and it is pleasing to note their readiness to comply with the recommendations made.

The cities of Lethbridge and Medicine Hat, not having resident Inspectors, received periodical visits; Lethbridge received five and Medicine Hat five.

Inspectors issued a number of permits for overtime for reasons of trade during the year. These were for stock-taking, seasonal occupations and banquets.

The accompanying tables explain in detail the work performed.

Table No. 1 gives the number of inspections made during the period under review of shops (retail and wholesale), factories, offices and office buildings, the number of employees, male and female, engaged in each industry and the number of recommendations made.

TABLE No. 1

A TABULATION OF INSPECTIONS, NUMBER OF EMPLOYEES, NUMBER OF  
RECOMMENDATIONS FOR THE YEAR ENDING MARCH 31, 1932

INDUSTRY—	No. of Inspections	No. of Places Inspected	No. of Males Employed	No. of Females Employed	Total No. of Employees	Recom- mendations Made
Shops .....	2,194	2,034	7,478	3,629	11,107	40
Factories .....	1,290	1,237	10,549	1,922	12,471	1,040
Offices and Office Buildings .....	1,154	1,115	2,990	1,804	4,794	22
Total.....	4,638	4,386	21,017	7,355	28,372	1,102



Table No. 2 gives a tabulation of inspections made by location of industries.

TABLE No. 2

TABULATION BY CITIES OF INSPECTIONS MADE, GIVING NUMBER OF PLACES INSPECTED, NUMBER OF EMPLOYEES (MALE AND FEMALE) EMPLOYED

Location—	No. of Inspections	No. of Places Inspected and Nature of Industry	No. of Employees		Total No. of Employees
			Male	Female	
Edmonton .....	792	725 Shops .....	2,758	1,387	4,145
“ .....	389	369 Offices and Office Buildings .....	1,022	624	1,646
“ .....	195	188 Factories .....	2,777	976	3,753
Total.....	1,376	1,282 Places .....	6,557	2,987	9,544
Calgary .....	1,130	1,048 Shops .....	4,077	1,856	5,933
“ .....	678	659 Offices and Office Buildings .....	1,863	1,078	2,941
“ .....	385	346 Factories .....	5,173	709	5,882
Total.....	2,193	2,053 Places .....	11,113	3,643	14,756
Lethbridge .....	178	167 Shops .....	459	273	732
“ .....	60	60 Offices and Office Buildings .....	73	77	150
“ .....	59	59 Factories .....	415	68	483
Total.....	297	286 Places .....	947	418	1,365
Medicine Hat .....	94	94 Shops .....	184	113	297
“ .....	27	27 Offices and Office Buildings .....	32	25	57
“ .....	45	45 Factories .....	346	82	428
Total.....	166	166 Places .....	562	220	782
Other Points .....	606	599 Factories .....	1,838	87	1,925



Table No. 3 gives a tabulation of the recommendations made by locality and industry. "Safety" covers the guarding of machinery, stairways and openings and the providing of fire escapes and access thereto. "Health" covers sanitation, ventilation and lighting. "Hours" and "Wages" are recommendations made to enforce the observances of the provisions of Sections 20 and 23 of the Act. "Number of children employed" are recommendations made, where children under fifteen years of age were found to be employed, for the discontinuance of same.

TABLE No. 3  
TABULATION OF RECOMMENDATIONS MADE ACCORDING TO LOCATION  
AND NATURE OF INDUSTRY

Location	Industry	Safety	Hours	Wages	No. of Children Employed	Health	Total
Edmonton.....	Shops .....	....	4	3	....	....	7
" .....	Offices and Office Buildings .....	....	....	....	....	....	....
" .....	Factories .....	10	....	3	....	1	14
	Total.....	10	4	6	....	1	21
Calgary.....	Shops .....	13	....	10	....	2	25
" .....	Offices and Office Buildings .....	2	1	18	....	1	22
" .....	Factories .....	59	4	13	....	6	82
	Total.....	74	5	41	....	9	129
Lethbridge.....	Shops .....	....	1	3	....	2	6
" .....	Offices and Office Buildings .....	....	....	....	....	....	....
" .....	Factories .....	6	2	2	....	....	10
	Total.....	6	3	5	....	2	16
Medicine Hat.....	Shops .....	1	....	....	....	1	2
" .....	Offices and Office Buildings .....	....	....	....	....	....	....
" .....	Factories .....	6	....	....	....	....	6
	Total.....	7	....	....	....	1	8
Other Points.....	Factories .....	918	7	3	....	....	928

TABLE No. 4  
TABULATION OF ELEVATOR INSPECTIONS

Location—	Passenger Elevators			Freight Elevators			Humphrey Elevators			Escalators			Total Numbers		
	No. of Insps.	No. of Elevs.	No. of Recs.	No. of Insps.	No. of Elevs.	No. of Recs.	No. of Insps.	No. of Elevs.	No. of Recs.	No. of Insps.	No. of Elevs.	No. of Recs.	No. of Insps.	No. of Elevs.	No. of Recs.
Edmonton .....	26	26	21	103	102	50	3	3	....	....	....	....	132	131	71
Calgary .....	90	89	99	205	187	166	8	8	5	....	....	....	303	284	270
Lethbridge .....	8	7	7	25	23	14	2	2	....	....	....	....	35	32	21
Medicine Hat.....	4	4	....	15	14	6	5	5	....	....	....	....	24	23	6
Other Points..	17	17	36	4	4	9	....	....	....	....	....	....	21	21	45
Total.....	145	143	163	352	330	245	18	18	5	....	....	....	515	491	413



## THE MINIMUM WAGE ACT

Returns of Inspectors show decreases in female employment under all Orders except that governing amusement trades and beauty parlours. The decreases from previous year were: manufacturing 240; laundries 38; hotels and restaurants 402; offices 771 and retail stores 311. Amusement trades and beauty parlours had an increase of 16.

A total of 3,687 inspections was made of 3,378 businesses, in which were employed 8,626 experienced females and 504 learners; 305 orders for adjustment of wages, 87 for adjustment of hours and 13 for adjustment of staff so that not more than 25 per cent would be in receipt of apprentice wages, were made.

Five Court cases were taken against employers for failing to pay minimum wages; four convictions were obtained and employers were ordered to pay back wages. Decision in the other case is pending.

A number of permits were issued for overtime to be worked to take care of emergencies that had arisen. In all cases employers advised the Department of the number of hours worked and the amount paid for same.

The accompanying table explains in detail the work performed.

TABULATION OF INSPECTIONS, NUMBER OF EMPLOYEES AND NUMBER OF  
RECOMMENDATIONS UNDER THE MINIMUM WAGE ACT FOR THE  
PERIOD APRIL 1, 1931, TO MARCH 31, 1932

	No. of Inspections	No. of Businesses Visited	No. of Experienced Female Employees	No. of Apprentices	Recommendations for Adjustments		
					Wages	Hours	Percent of Apprentices
Order No. 1— Manufacturing .....	270	255	899	67	11	1.	....
Order No. 2— Laundries, Dyeing and Cleaning.....	50	44	454	22	16	....	....
Order No. 3— Hotels and Restaurants	674	539	1,796	72	136	47	7
Order No. 4— Personal Service .....	147	132	249	9	10	....	....
Order No. 5— Office Occupation .....	1,811	1,705	3,136	150	52	12	2
Order No. 6— Retail Establishments .....	695	665	1,901	179	79	26	3
Order No. 7— Fruit and Vegetable Canning .....	2	1	105	....	....	....	....
Order No. 8— Telephones and Post Offices .....	38	37	86	5	1	1	1
Totals of All.....	3,687	3,378	8,626	504	305	87	13



INSPECTION OF THEATRES  
(G. P. BARBER, *Chief Inspector*)

It is again, not possible to report a balance of revenue with the preceding period of activity in theatrical circles. While the drop is not so large as that of last year it is nevertheless sufficient to show that conditions are still uncertain. A comparison of film reports will add to this opinion, there having been some 2,000 fewer received.

It would appear that many motion picture prints in circulation during the past twelve months have been of an inferior quality. There are 541 complaints out of a total of 13,972 reports. The various exchanges advise that 78 prints were taken out of circulation. Eighty-two prints were re-edited with new insertions and a general revision given to the remaining 381.

There were three film fires during the year. One at the Orpheum Theatre, Blairmore, on May 30th, 1931, destroying 1,000 feet of film. Another in the Variety Theatre, Calgary, on September 1st, 1931, with a loss of 1,000 feet of film and the third on December 8th, 1931, in the Capitol Theatre, Calgary. While the latter fire was not so destructive to film, there being but 45 feet destroyed, it was somewhat serious to the man in charge of the machine. He was rushed to the hospital suffering from the effects of gas fumes inhaled during his attempt to confine the fire, but was able to leave the hospital next day.

These three fires started with what is known as a "gate" fire. The gate is that part of a projector which holds the film before the aperture and upon which the light is focused. So long as the film continues to pass this focal point at the intended rate of speed it will not ignite. But with a dried out patch, broken sprocket holes or otherwise defective film, a stop may occur which would cause the film to take fire. This is what happened in the cases mentioned. It was with a desire to help lessen such risks that the film report system was instituted.

Some progressive changes have been made in the regulations pertaining to projectionists. The clauses for provisional certificates have been eliminated and the apprenticeship period extended from six to twelve months. The department is also permitted to confiscate motion picture prints which have become unfit for safe running in theatres.

The following tables enumerate the inspections, examinations and licenses issued together with revenue received:

TABLE No. 1

TABULATION OF THEATRE INSPECTIONS AND NUMBER OF RECOMMENDATIONS  
MADE UNDER THE THEATRE REGULATIONS FOR THE YEAR BEGINNING  
APRIL 1, 1931, AND ENDING MARCH 31, 1932

Total Number of Inspections.....	228
Number of Theatres Inspected.....	228
Recommendations re Exits.....	125
Recommendations re Aisle Seats.....	12
Recommendations re Ventilation and Sanitation.....	9
Recommendations re Fire Precautions.....	24



TABLE No. 2

TABULATION OF PROJECTION ROOM INSPECTIONS AND RECOMMENDATIONS  
MADE UNDER THE THEATRE REGULATIONS FOR THE YEAR BEGIN-  
NING APRIL 1, 1931, AND ENDING MARCH 31, 1932

Projection Rooms Inspected.....	136
Number of Projectors Inspected.....	180
Recommendations for Repairs.....	58
Projectors Condemned as Defective.....	8
Number of Wiring Recommendations.....	25
Recommendations re Ventilation.....	21
Recommendations for Fire Precautions.....	34
Number of Rooms Condemned.....	7

TABLE No. 3

SUMMARY OF EXAMINATIONS TOGETHER WITH NUMBER AND CLASS OF CER-  
TIFICATES ISSUED TO PROJECTIONISTS FOR THE YEAR BEGINNING  
APRIL 1, 1931, AND ENDING MARCH 31, 1932

Number of Certificates Issued—	
First .....	68
Second .....	97
Third .....	76
Provisional .....	Nil
Apprentice .....	47
Provisional Permits: 28mm-16mm.....	23
Number of Examinations held—1st.....	15
2nd.....	44
3rd.....	60
Number of Permits Issued.....	4
Number of Forfeitures.....	6

Cash Receipts .....	\$2,704.00
Certificates .....	\$2,674.00
Forfeitures .....	30.00
	<u>\$2,704.00</u>



## REPORT OF MINIMUM WAGE BOARD

(A. A. CARPENTER, *Chairman*)(W. SMITTEN, *Secretary*)

---

Representations were made to the board by Mr. Hale, Inspector of Post Offices, in respect of the difficulties that post masters in the small towns and villages were experiencing due to the application of Order No. 5 to this class of employment. After careful consideration Order No. 5 was amended, removing from its scope employment in post offices, and this class of employment was included within the scope of Order No. 8.

Two requests were received from firms to work female employees overtime to permit of seasonal rush trade being taken care of; the requests were granted.

Permission was also granted to storekeepers in Calgary, Edmonton, Lethbridge and Medicine Hat to work employees overtime to take care of Christmas shopping rush. Payment for overtime at not less than regular rates, and a report of all overtime worked was required.

Two requests were received from firms for permission to employ a greater percentage of apprentices than is permitted by regulation, due to their inability to secure a sufficient number of experienced employees. Investigations made by the board revealed a shortage of experienced employees and the requests were granted.

Three requests were received for permission to transfer employees from one branch to another at special rates to be fixed by the board. These requests were granted, the employer being required to furnish the board with a statement of earnings during the period of such transfer.

Special consideration was given to a number of individual female employees, and handicap rates varying from 10% to 25% below regular minimum rates were fixed for ten of these females, whose cases were specially considered.

Mr. James Kellas, who had been a member of the board since its inception, resigned due to his business requiring him to move outside the Province. Mr. John Blue, secretary, Chamber of Commerce, Edmonton, was appointed to fill the vacancy.

The matters considered by the board necessitated the holding of three meetings.



BOILER INSPECTION  
(F. W. HOBSON, *Chief Inspector of Boilers and Machinery*)

During the summer months of the past year our service has been widely extended to the limits of the Provincial boundaries, particularly those lying in the most northern and north-western areas, some of which we have not previously worked. Inspector Scott covered the territory lying between Waterways and Fort Fitzgerald at the request of several steam users. Some of the boilers which we inspected and tested had been furnishing power for years without either an inspection or test.

Inspector Cargill thoroughly covered the inspection work throughout the High Prairie, Peace River, Fairview, Spirit River and Grande Prairie districts between the months of June and September. The last previous inspection made in these districts was in 1928, and during this interval a number of boilers and pressure vessels had been shipped in and put into operation, bringing the total up to 280 in the areas visited. Mr. Cargill conducted examinations for engineers' certificates under the Act at a number of advertised points, and in addition carried out 45 inspections under The Factories Act at sawmills, grain elevators, etc., where required, in accordance with the economical policy of the bureau.

Following this policy of covering inspections provided by the several Acts administered by the bureau during one visit of inspection, a total of 572 such inspections have been carried out in the nine inspection districts, but principally in the Medicine Hat, Drumheller and Vegreville districts.

The following is a tabulation of boilers and other pressure vessels inspected between April 1st, 1931 and March 31st, 1932:

Type of Boiler or Pressure Vessel Inspected	Inspectors									Total
	Marshall	Dick	Hargreaves	Hawkins	Bradshaw	McLeod	Cargill	Scott	Alexander	
Horizontal Return Tubular.....	35	39	33	45	30	31	84	64	41	402
Horizontal Furnace.....	3	....	3	1	4	2	18	21	7	59
Water Tube.....	54	12	12	26	6	5	13	24	....	152
Locomotive .....	28	57	22	38	84	34	170	121	141	695
Vertical .....	28	17	14	3	6	8	24	44	13	157
Air Receivers .....	77	158	55	19	146	15	138	64	220	892
Ammonia Receivers (Refrig. Units)	4	1	2	2	1	4	15	10	5	44
Steam Cookers .....	....	....	2	....	....	....	....	....	....	2
Steel Heating .....	30	66	74	19	65	15	14	72	37	392
Cast Iron .....	....	46	109	23	55	11	10	10	44	308
Miscellaneous .....	....	....	14	....	....	....	....	....	....	14
Total No. Inspected.....	259	396	340	176	397	125	486	430	508	3,117
Total No. Inspection Visits.....	311	496	751	360	454	296	502	768	519	4,457
Certificates Issued .....	194	335	340	176	304	125	374	261	370	2,479
Condition of Pressure Vessels Inspected:										
Good .....	176	253	155	91	297	59	312	188	310	1,841
Fair .....	80	143	170	70	91	65	146	219	167	1,151
Poor .....	3	....	6	11	8	1	28	22	21	100
Condemned .....	....	....	9	4	1	....	....	1	10	25
Total .....	259	396	340	176	397	125	486	430	508	3,117
Special Inspection under Sec. 13 of The Boilers Act.....	17	12	7	1	....	1	5	8	4	55



SUMMARY OF BOILER INSPECTIONS FOR THE YEAR 1931-32  
(Data taken from Inspectors' Returns)

Inspectors	Number of Inspections				Total Visits	Mode of Inspection			No. of Certificates Issued
	Power	Heating	Air	Refrig- eration		External	Internal and External	Hydro Test	
Hawkins .....	102	59	24	2	360	47	140	139	176
Marshall .....	135	18	65	4	311	15	207	196	194
Bradshaw .....	116	97	146	1	454	94	266	301	304
Scott .....	227	81	59	10	768	127	250	247	261
Dick .....	114	123	163	1	496	92	309	288	335
Hargreaves .....	97	197	60	2	751	160	196	332	340
McLeod .....	96	35	16	4	296	23	121	84	125
Cargill .....	291	24	132	7	502	175	278	318	374
Alexander .....	190	80	212	3	519	238	247	463	370
Totals.....	1,368	714	877	34	4,457	971	2,014	2,368	2 479

Considering the reduction in employment in the coal mines, oil fields, sawmills and other industries of the Province, the number of candidates for engineers' certificates compares very favourably with those of past years. The total record for the year resulting from examinations of candidates for engineers' certificates which are held each month at district headquarters throughout the Province is as follows:

NUMBER AND CLASS OF CERTIFICATE ISSUED

Inspectors	1st Class	2nd Class	3rd Class	Special	T.F. Cert.	F.F. Cert.	Prov. Cert.	Ren. Prov. Cert.	Welders	Temporary
Hawkins .....	...	...	1	2	...	...	2	...	...	...
Marshall .....	...	...	5	3	1	...	8	4	...	3
Bradshaw .....	...	...	3	...	1	2	9	6	...	...
Scott .....	...	1	12	3	2	3	35	16	...	...
Dick .....	...	1	3	1	...	...	6	6	...	1
Hargreaves .....	...	1	9	6	1	1	11	6	...	...
McLeod .....	...	1	3	1	2	...	17	9	...	5
Cargill .....	...	3	16	6	13	12	42	8	1	...
Alexander .....	...	...	3	...	2	2	29	12	1	...
Office .....	...	4	5	2	5	...	4	69	2	3
Totals.....	...	11	60	24	27	20	163	136	4	12

Inspection of compressed air equipment and high pressure compressed air mains, with which a number of the coal mines in this Province are equipped, forms a very responsible part of our inspections. Compressed air pipe lines, ranging from 3 inches to 6 inches in diameter, carrying upwards of 800 lbs. per square inch, are used for conveying power to the coal cutting machines, hoists, pumps and air locomotives in the majority of the larger mines. These pipe lines are subject to deterioration, due to moisture, erosion and sulphur content of the mine gases. During the past year Inspector Marshall inspected nearly 30 miles of this high pressure piping in three of the principal mines in the Crows Nest Pass, some of which have been in continuous service between 15 and 20 years. The piping had to be blanked off in



sections and subjected to water pressure tests up to 1,500 lbs. per square inch, the hammer test being applied to the full length of the pipe, while under pressure, to determine its condition; 128 lengths of piping were found to be dangerously thin, and this piping was condemned and replaced. Losses from air leaks had previously been so great that in one instance the over-hauling of the pipe lines in this mine, following inspection and test, allowed one line compressor to be cut out of service.

A few casualties, resulting from the operation of steam and other pressure vessels and damage to power machinery and equipment used in connection therewith, have been reported during the past year.

Reginald Kallis, age 23, died as the result of an accident at the Bush Creek Lumber Co's plant. The deceased, who was acting as fireman, had his left arm badly crushed while tightening up the slide to the engine rocker arm. Death was due to blood poisoning.

An employee at the Ogilvie Flour Mills had both legs badly burned below the knees when he climbed through an inspection door at the rear of a boiler which had been closed down for washout. Mr. Barnett landed with both feet into a bank of hot ashes inside the boiler setting, and sank up to the knees in hot dust, which he had previously attempted to quench with water from a hose. He was severely burned before getting clear.

An explosion of gas in the firebox of a boiler operating at the Mayland Oil Co's well, Southern Alberta, resulted in minor injuries to one of the operators.

We have from time to time drawn the attention of all concerned to the dangerous practise of testing pressure vessels and pipe lines with compressed air, also of the use of this element by those who are not acquainted with its destructive properties.

On April 4th, two men employed by the Canadian Western Natural Gas Co., were injured while subjecting a gas main to an air test pressure of 55 lbs. per square inch. While under this pressure the chain securing the joint at the end of the pipe line broke, severely injuring one man in the head while the other received injuries to one hand. Similar accidents have had fatal results.

While attempting to empty a barrel of oil with compressed air, a garage man at the Pyramid Motors, Lethbridge, received severe shock and bruises when the barrel exploded due to excess pressure.

An 8-inch by 60-inch by  $\frac{3}{8}$ -inch steel flask containing liquified carbon dioxide and carrying a pressure between 800 and 1,300 lbs. per square inch exploded on January 30th at Lethbridge Brewery Bottling Plant, practically wrecking the building which is 95 feet long by  $35\frac{1}{2}$  feet wide by 12 feet high. Neither of the two workmen who were in the building, when the explosion took place, received injury other than shock.

While this class of pressure vessel does not come within the jurisdiction of The Boilers Act, we took the opportunity to enquire into this affair, and on examining the sample fragments of the container it was found to be made of a very low grade



coarse grained steel, highly crystallized and altogether unsuitable for the purpose used. The safety disc was found to be intact and had not been blown. This disc had not been tested for about five years.

Upon request of the Department of Indian Affairs we investigated the reason for the explosion of a hot water service heater at the old Sun School, Gleichen. The head of this 36-inch cast iron vertical boiler ruptured, flooding the adjoining corridor with about 500 gallons of boiling water and clouds of steam. Fortunately all the school children had left the building previous to the accident, while the caretaker was in another part of the premises. Upon reporting to the Department the apparent cause of the explosion they invited our co-operation to supervise the installation of a new plant which was constructed and put in to comply with the requirements of the regulations.

While inspectors have been called upon from time to time to inspect and advise in respect of pressure vessels owned by the Federal Government, our responsibilities for regular and systematic supervision are in doubt. An understanding that would make definitely clear the reaction of the several departments of Federal Government to the application of the provisions of The Alberta Steam Boilers Act to all pressure vessels used by them in the Province is desirable.

The three 36-inch horizontal tubular boilers, which comprise the heating plant at the Scona High School, failed during school hours on November 25th, owing to the water leaving the boilers when the fuse on the automatic starting equipment controlling the electric return pump had blown, thereby closing down the return water supply. On returning to the boiler room the janitor found the plates and tube sheets of the three boilers had become overheated to an incandescent degree. Temporary repairs were rushed to completion, seams, rivets and tubes being tightened up in about eleven hours, at which time the first boiler was ready for service.

We ordered changes in the system of valves on the return water line which had been installed during the previous summer in order to prevent a recurrence of this condition. These boilers have been in service for about twenty-two years and in view of the cost of permanent repairs we have recommended they be discarded.

A condition known as "caustic embrittlement" was found to have considerably weakened the main drum of a boiler which had been in service at the Mental Hospital, Ponoka, since the year 1915. The hospital plant consists primarily of four 500 H. P. Babcock & Wilcox water tube boilers, each having a main drum 54 inches by 22 feet by  $\frac{5}{8}$ -inch operating at a working pressure of 200 lbs. per square inch. The adjoining boiler also showed similar signs of this deteriorating action. Notwithstanding the high percentage of sodium sulphate content in the feed water, soda ash was added thereto for a period of about ten years in order to furnish the hospital with large quantities of extra soft water daily.

With steel under a high stress, a concentrated solution of hot sodium hydroxide or caustic soda, will destroy the adhesions of



the steel crystals, causing minute cracks in the plates and particularly in the vicinity of rivet holes. These cracks can, in their early stages, only be seen with a microscope and do not usually occur until the action has been at work in the boiler for a number of years, when its effects gradually become evident.

Upon carefully investigating this case, it was found that the girth seam in the front course of the boiler drum was badly affected and in a very dangerous condition. Only after making a number of inspections, during which a number of rivets and butt straps of the adjoining seams were removed could it be decided whether it would be worth while to repair the drum. However, the defective portion was removed and a patch fitted, in order to keep the boiler in service at a reduced pressure of 180 lbs. per square inch. It is further noted that some of the rivets have become weakened in the adjoining boiler. Both boilers are being kept under close observation.

One of the oil fired horizontal tubular boilers at the Jasper Park Lodge power plant was badly damaged last winter due to the overheating of the fire sheet. This front course of the boiler was distended. Upon inspection the inspector ordered a new course to be fitted complete and the boiler was removed to the Winnipeg shops for this repair. Our inspector supervised the installation of the boiler after the repairs had been completed. The engineer in this case was exonerated from blame on account of his not being allowed to open up the boiler for cleaning the interior heating surfaces when he deemed it was necessary to do so.

Two steel boilers were condemned in the St. Paul district, due to deterioration of the lower portion of the firebox plates. The inspector reported the plates to have been badly wasted owing to neglect in keeping the external surfaces free from moisture. He condemned both boilers as unfit for further service, repairs required being too extensive.

A copper brazed air tank failed along the longitudinal seam while under a hydrostatic and hammer test. Before failing, the seam developed small pin hole leaks alongside the seam. The outside of the shell plate had previously shown no signs of weakness or deterioration other than a light white deposit, possibly of borax with which the brazed joint is fluxed during the process of construction.

A number of heating boilers have been reported in defective condition, some heavily scaled and in other cases with the water columns and water gauge fittings plugged with scale. A sample of this negligence on the part of owners and operators was forwarded from Turner Valley. A fusible plug, removed from a heavily scaled heating boiler, was covered on the water side to the depth of nearly 2 inches with a solid scale formation. The plug had fused due to excessive temperature and the scale had prevented the water and steam from escaping through the plug and thereby giving warning of the dangerous condition of the boiler heating surfaces.

In addition to the foregoing, the inspector states: "Quite a lot of trouble is being experienced with these low pressure plants



which The Boilers Act does not require to be under the care of a certificated engineer. The consequence is that the lowest salaried men are the best for this purpose as far as some of the oil well operators are concerned. These men are required to take charge of the oil separators in addition to the heating boilers and quite a few explosions of separators and piping, in addition to failures of heating boilers, have resulted owing to this class of men being employed.

“In one case which came to my notice the fireman complained about being unable to keep up the required steam pressure and asked for an additional gas burner to be installed to supply more heat. Upon examining the firebox of this boiler I found several crown stays and a number of the tubes leaking very badly, consequently I had the boiler opened for inspection and found the water spaces surrounding the firebox, also the barrel of the boiler, nearly half-full of mud and scale. Fortunately the firebox had been lined with fire bricks, otherwise the plates would have certainly been burned and the boiler rendered useless for service. After extensive repairs had been made to this boiler it was found that the original gas burner furnished twice the necessary heat required to supply the boiler without any additional burners being necessary.”

A cast iron sectional heating boiler in service at the Provincial Police Building, Drumheller, was found to be operating under dangerous conditions. Someone had undertaken to plug the discharge opening of the safety valve, rendering it entirely inoperative.

The safety valves on two air receivers were also reported with plugs in the discharge openings by two of the district inspectors. The safety valve attached to a high pressure boiler in the Drumheller district was also noted to be in defective condition due to the bronze seating in the valve body having loosened from the casting. The valve and seating raised simultaneously when the pressure reached the point where the valve should discharge. This is a very unusual occurrence.

The main engine furnishing power at the Redcliff Brick & Coal Co's plant was wrecked, when without warning, the cross head fractured through the piston rod connection, necessitating very extensive repairs. This engine has been in service since 1884. On checking over other parts of this engine it was noted that other similar accidents had weakened the main frame which had also to undergo repairs. No personal injury resulted from this accident.

We have had a number of demands from manufacturers and dealers for approval and acceptance of fusion welded pressure vessels such as the present Canadian Code prohibits. At the present time one of the leading oil and gas concerns in the Province are calling for tenders for several all welded gas receivers which are intended to operate at 200 lbs. per square inch. This proposed order has created enquiries from manufacturers in Ontario and Quebec, where a large portion of such equipment is fabricated for the West. The situation had become increasingly difficult for us on account of the Inspection Bureaus in both of these provinces having accepted the designs and specifications



for this class of pressure vessels, regardless of the Interprovincial Code requirements, in order to satisfy the demands of the manufacturers.

We are not at all unwilling to recommend the adoption of some necessary provisions to cover the modern practice of fusion welding for pressure vessels to carry over 100 lbs. per square inch. I would recommend that a conference of the chief inspectors be arranged for, to go into this matter with the manufacturers in order that any such provisions as we may recommend to you may be uniform with the standards in other provinces in the Dominion.

One of the largest single boiler units in Western Canada is now being installed for the city of Edmonton. This boiler is the largest in this Province, being rated at 1,290 H.P. It is known as a "Stirling" type water tube boiler and was built in Canada by the Babcock Wilcox-Goldie McCulloch Company of Galt, Ontario. The height of the boiler from the floor level to the upper superheater tubes is 44 feet 5 inches, it contains 12,907 square feet of heating surface and will operate at a working pressure of 425 lbs. per square inch with a maximum steam temperature of 650° Fahrenheit. The contract price of the boiler is \$106,000.

The revenue for the fiscal year accruing from inspection fees, engineers' examinations, special inspections, for which the expenses have been met by those requiring such service, the survey of designs, etc., totaled \$23,319.25 and is detailed as follows:

For Inspection of Boilers, Refrigeration Plants and Special Inspections	\$20,194.10
For Examination of Candidates for Engineer's Certificates.....	2,282.50
For Survey of Drawings.....	489.00
For Miscellaneous .....	353.65
	<hr/>
	\$23,319.25



## ALBERTA GOVERNMENT EMPLOYMENT OFFICES

(WM. CARNILL, *Director*)

General industrial depression during the past year, with its consequent increase in unemployment, placed a heavy burden upon the employment service. Our offices were carrying heavy registrations throughout the year, and due to the various specially created works to relieve unemployment, placements were within .02 per cent of those recorded during the previous year. Our officials worked in close co-operation with the civic officials on unemployment relief measures.

Of the 50,084 vacancies filled, 44,974 were for males and 5,110 for females.

Placements in the male section were recorded as 9,807 being sent to farms, 300 to building construction, 58 to clerical work, 223 to personal occupations, 11,187 to general labouring, 573 to lumbering, 107 to manufacturing industries, 3 to professional occupations, 158 to railroad construction and maintenance, 981 to mining, 473 to miscellaneous occupations and 21,219 to casual employment.

Of the female placements 958 were sent to farms, 15 to clerical positions, 2,343 as domestics, 7 to manufacturing industries, 10 to miscellaneous occupations and 1,779 to casual employment.

Casual placements are those where the work is of less than one weeks duration. In the male section these constitute 47% of the total placements and 35% of the female section.

There was a slight increase in the operating costs, the average cost per vacancy filled being 78.89 cents as compared with 78.56 cents for the previous year.

The Alberta offices, while being located in the five cities, have volunteer agencies throughout the Province, and are well able to serve employers and workers. During the year 14,487 placements were made outside of the centres in which the offices are situated. Inter-Provincial transfers accounted for 7 vacancies in the male section and 2 in the female section necessitating importation, while 119 males were shipped to employment in other provinces.

Workers entering Canada under contract must secure special authority from the Minister of Immigration. Before such authorization is given an endeavour is made by the employment service to locate suitable Canadian workers, and upon numerous occasions we have been consulted in this regard.

Appreciation of the service given is indicated by the number of vacancies listed and the large number of applicants registered at our offices. Of the 45,282 vacancies listed in the male section, 99.32% were filled, and of the 80,465 applicants, 56% were given



employment. Of the 5,240 vacancies in the female section, 97.5% were filled, and of the 8,793 female applicants, 58.14% were given employment.

All persons in receipt of unemployment relief had to be in continuous registration at the employment offices, and men for camps, and the relief works within the cities, were selected through our service. Representatives of this department were required to check and certify relief work payrolls and direct relief accounts submitted by the cities. The following tables indicate the extent of relief work afforded, the numbers assisted by direct relief, and the cost thereof:

VOLUME OF EMPLOYMENT AFFORDED BY SPECIAL WORK CREATED  
TO RELIEVE UNEMPLOYMENT

	Number of Individuals Given Work	Number of Man-Hours Worked
Calgary .....	2,495	614,035
Edmonton .....	2,862	478,944
Lethbridge .....	651	240,218
Medicine Hat .....	336	80,374
Drumheller .....	107	17,574
	6,451	1,431,145

STATEMENT SHOWING NUMBER OF SINGLE MEN SHIPPED TO CAMPS  
OPERATED BY THE DOMINION GOVERNMENT

	Banff	Lake Louise	Jasper	Elk Island	Waterton Park	Total
Calgary .....	99	284	.....	.....	.....	383
Edmonton .....	....	.....	324	138	.....	462
Lethbridge .....	....	.....	.....	.....	158	158
	99	284	324	138	158	1,003

PROVINCIAL FORESTRY CAMPS NEAR OLDS

Calgary.....	195
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NUMBER OF MEN PLACED ON RIVER PROTECTION WORK  
(Dominion Government Project)

Calgary.....	927
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STATEMENT SHOWING NUMBER OF PERSONS ASSISTED BY DIRECT  
RELIEF AND THE TOTAL COST

	No. of Heads of Families Given Direct Relief	No. of Dependants on Heads of Families	Individual Relief Cases Covering One Person Only	Total Number Given Direct Relief	Total Cost of Direct Relief
Calgary .....	2,666	7,783	3,721	14,170	\$815,046.02
Edmonton .....	2,639	8,297	3,637	14,573	715,614.37
Lethbridge .....	710	2,206	570	3,486	59,387.95
Medicine Hat .....	218	761	51	1,030	17,297.50
Drumheller .....	104	329	23	456	6,021.03
	6,337	19,376	8,002	33,715	\$1,613,366.87

The accompanying charts and tables show the business transacted by the employment service for the period under review, by occupations, months and offices.



TOTAL BUSINESS BY OCCUPATION—APRIL 1, 1931, TO MARCH 31, 1932

MALE

Occupation	Applications	Unplaced March 31	Vacancies	Unfilled March 31	Placements	Transfers	
						In	Out
Agriculture .....	9,767	679	9,944	.....	9,557	135	250
Building Construction .....	3,072	662	302	.....	300	1	....
Clerical and Mercantile.....	1,174	315	58	.....	56	2	2
Domestic and Personal.....	1,454	390	223	.....	222	1	1
General Labourers .....	55,142	10,019	11,187	.....	11,186	....	1
Lumbering .....	490	121	612	.....	569	4	4
Manufacturing .....	2,112	479	111	.....	104	3	3
Professional and Technical.....	57	4	4	.....	3	....	....
Railroad Construction and Operation	183	4	158	.....	158	....	....
Mining .....	2,276	98	986	.....	974	7	7
Miscellaneous .....	2,477	502	477	.....	469	4	4
Casuals .....	2,261	.....	21,220	.....	21,219	....	....
Totals.....	80,465	13,273	45,282	.....	44,817	157	272

FEMALE

Agriculture .....	1,396	59	1,022	6	924	33	34
Clerical and Mercantile.....	376	53	15	....	15	....	....
Domestic and Personal.....	4,917	385	2,407	11	2,314	28	29
Manufacturing .....	12	6	7	....	7	....	....
Professional and Technical.....	1	.....	....	....	....	....	....
Miscellaneous .....	43	7	10	....	10	....	....
Casuals .....	2,048	59	1,779	....	1,779	....	....
Totals.....	8,793	569	5,240	17	5,049	61	63

TOTAL BUSINESS BY DISTRICTS—APRIL 1, 1931, TO MARCH 31, 1932

MALE

	Applications	Vacancies	Placements	Transfers	
				In	Out
Calgary .....	38,240	16,355	16,160	49	77
Edmonton .....	22,449	15,033	14,883	34	153
Lethbridge .....	10,725	7,482	7,432	26	27
Medicine Hat .....	4,395	4,074	4,068	4	5
Drumheller .....	4,656	2,338	2,274	44	10
Totals.....	80,465	45,282	44,817	157	272

FEMALE

Calgary .....	4,894	1,881	1,820	3	54
Edmonton .....	2,699	2,418	2,339	17	....
Lethbridge .....	619	423	401	16	7
Medicine Hat .....	371	338	330	8	2
Drumheller .....	210	180	159	17	....
Totals.....	8,793	5,240	5,049	61	63

TOTAL BUSINESS BY MONTHS—APRIL 1, 1931, TO MARCH 31, 1932

MALE

	Applications	Vacancies	Placements	Transfers	
				In	Out
April .....	5,232	3,730	3,669	21	31
May .....	6,420	2,959	2,943	14	19
June .....	6,762	2,494	2,479	12	16
July .....	7,418	4,320	4,313	8	10
August .....	6,008	3,117	3,065	38	49
September .....	6,820	4,176	4,164	7	85
October .....	10,178	7,399	7,147	18	19
November .....	7,136	3,434	3,410	5	7
December .....	4,554	2,616	2,618	8	7
January .....	6,347	3,512	3,500	8	7
February .....	7,211	3,883	3,878	5	6
March .....	6,379	3,642	3,631	13	16
Totals.....	80,465	45,282	44,817	157	272



FEMALE					
	Applications	Vacancies	Placements	Transfers	
				In	Out
April .....	659	510	476	11	11
May .....	814	650	622	3	4
June .....	612	439	419	7	6
July .....	838	361	353	6	7
August .....	1,002	543	514	8	9
September .....	886	462	448	5	6
October .....	963	503	494	7	6
November .....	620	365	352	2	3
December .....	457	329	309	4	2
January .....	797	440	444	1	1
February .....	546	315	305	4	4
March .....	599	323	313	3	4
Totals.....	8,793	5,240	5,049	61	63



